STATEWIDE INTEROPERABILITY GOVERNING BOARD
MEETING MINUTES
August 11, 2015

ATTENDEES: Ron Baldwin, Vice Chair, State CIO; Kevin Myhre, MLCT; Mike Doto, MSVFA; Geoff Feiss, MTA; Bonnie Lorang, MITS; Tom Butler, DOJ/MHP; Siri Smillie, Governor's Office; Jason Smith, Governor's Office of Indian Affairs.

GUESTS: Quinn Ness, DOA/SITSD; Dan Sullivan, DOA/SITSD; E. Wing Spooner, DOA/SITSD; Mike Feldman, DOJ/MHP; Mike Fashoway, MSL; Dale Osborne, DOJ/MHP

CONFERENCE CALL: Joe Briggs, MACO; Patrick Lonergan, MFCA; Keith Cook, Motorola Solutions

CALL TO ORDER: The meeting was called to order by Vice Chair, Ron Baldwin at 1:40 pm.

INTRODUCTIONS: Ron Baldwin asked members to introduce themselves. Captain Curt Stinson was unable to attend today, but he was recently appointed by Governor Bullock to replace Chief Roger Nasset as the Montana Association of Chiefs of Police (MACOP) representative.

APPROVAL OF MINUTES: Geoff Feiss moved to accept the July minutes and Kevin Myhre seconded. Geoff asked that a sentence be changed in the minutes from "Geoff Feiss commented on the importance of getting these four sites under warranty" to "Geoff Feiss expressed concern about the lack of accountability by four site owners for taking proper responsibility to implement extended warranties on equipment located at those sites." Quinn clarified that ownership is clear on three of the four sites:
- Dawson County owns the trunking equipment at the Makoshika and Fallon communication sites, but the county commissioners have chosen not to participate in the extended warranty project.
- The Confederated and Salish Tribes (CKST) also has chosen not to participate in the extended warranty project for the trunking equipment located at the Jette communication site.
- Ownership of the trunking equipment at the Highwood Baldy site is not clear.

The minutes will be changed. The motion carried.

DRAFT EXECUTIVE ORDER TO CONTINUE THE SIGB: Members reviewed the draft Executive Order to continue the SIGB and made the following suggestions and comments:
- Geoff suggested a word change that could not be made since it was from statutory language.
- Bonnie Lorang said that MITS encourages using language from the Act related to "leveraging existing infrastructure."
- In the fifth "WHEREAS," the word "but" in the last line will be deleted.
- In the Purpose Statement, Geoff thought the language related to providing advice "in the consultation with FirstNet" sounded awkward. However, the "consultation" term is from statuary language related to FirstNet's consultation process.
- Kevin suggested changing the phrase "the state's" to "statewide" throughout the document.
- Patrick Lonergan stated that MFCA would like to see the SIGB's goal as not only in support of the trunked system, but also in support all communications needs across the state, including voice and data communications. It would be appropriate to insert another "whereas" to the effect that the SIGB is in support of all interoperable communications.
- Siri said there is language from the current order that could be inserted to reflect the broader purpose that Patrick referred to.

- In the Composition section, Bonnie suggested that a representative from rural wireless providers be added. She believes their voice is critical in this discussion.

Quinn suggested keeping the comment period open for another week. The goal is to complete a final draft at least one week in advance of the next SIGB meeting so the SIGB can adopt the final draft. Quinn will incorporate these changes and send out another draft.

FIRSTNET DATA COLLECTION & MAPPING:
Dan Sullivan explained that FirstNet (FN) has made a data request to the states as it moves towards issuing an RFP and selecting a national private partner to deploy the network. It has requested names, addresses and contact information of all public safety entities in Montana. Dan is about half way through that process. FN also has a survey located at publicsafetytools.info and public safety entities are encouraged to take it.

- To date, 48 responses have been received, with 75% of them from the fire service, 25% from law enforcement, and 1 response from county emergency operations. No responses have been received from the EMS community. He asked that SIGB members ask association members to re-visit the survey and emphasized that it is an important opportunity to have input in the deployment plan that FN will be formulating for Montana.
- FN also provided a baseline coverage map of Montana that is based on a national scale. FN has asked SIGB to formulate five coverage-area priorities on where the SIGB would like the FN network deployed in the state according to what criteria.

The State Library GIS section was asked to review the FN map and scale it down using Montana data to make it a more suitable tool that can be used to decide on coverage-area priorities. Dan introduced Mike Fashoway from the Montana State Library, who provided the following report:

- The FN map output is scaled to nationwide numbers since it used common, nationwide GIS data sets, such as population and traffic. Naturally, Montana's results will be far fewer than most of the rest of the country. Green on the FN map illustrates "low traffic" area, blue is medium and red is high. The FN map shows a large expanse of area in Montana that appears as gray, which FN refers to as "non-terrestrial." According to the FN map, about 79% of Montana is non-terrestrial. Mike said this is a far higher percentage than many surrounding states.
- Mike's efforts involved refining the data to provide more meaningful mapping to assist the SIGB with determining coverage-area priorities. He used many of the same data sets as FN, but also substituted some Montana versions to create different map layers such as, census population densities, school locations, traffic counts (with data obtained from MDT), and others.
- Mike decided to abandon the FN prioritizations of "high, medium and low," so that such decisions could be left to the SIGB.
- Although Mike's new map only incorporates partial data, it shows that only 53% of Montana's area is "non-terrestrial." A lot of this area consists of national parks and federal lands. He doesn't know yet if FN will be excluding these areas.
- Evidently, non-terrestrial areas have been already been identified as too costly to serve. The FN recommendation is to utilize satellite or deployable communications in those areas.
- The Montana map uses more or less the same data sets as the FN map. In some cases, the data used in the Montana map is more recent.
- The FN product includes a layer of high-risk areas of interest, which includes items such as NASCAR raceways and various industrial classifications, for which Montana does not have good data sets. A lot of these areas are also picked up by other data sets that are being used.
- Public Safety Answering Points (PSAPs) have filled out a survey with 3-month averages for 9-1-1 calls, which will be incorporated in the Montana map as well. All PSAPs have responded.
- Referring back to the FN survey at publicsafetytools.info, a question was posed to Dan asking what the response rate had been thus far. The goal is to have 100 responses, and only 50 have been received so far, which is not statistically valid.

- Mike explained that the FN analysis is at national scale, so all the numbers are scaled to minimum thresholds. For example, traffic data on US Hwy 2 drops out of the FN analysis, yet it is a major highway in Montana.
- Montana Highway Patrol (MHP) will probably end up being the largest subscriber, and it will need coverage on all Montana's major roadways.
- Tom Butler noted that this mapping exercise is likely to produce a map similar to Verizon's asset map because Verizon's network follows where the population (customers) is located. If we have to submit five areas, Tom suggested selecting areas where there is no coverage, where something could actually be improved. He pointed out that FN is not needed in Billings, which already has good coverage from private carriers. Jason Smith agreed. Tom said that a town such as Lame Deer would be a good place to have FN. MHP has a lot of truck complaints in that area, and there is no cell phone coverage at all.
- Dan indicated that FN will likely partition 4G equipment where that equipment already is located—in areas such as Billings—and FN will run on one side of the partition, which led to the question of what role is the SIGB playing in making recommendations?
- SIGB will be identifying priority coverage areas. If a low population area is selected, it likely will not be included in FN because there is not a market or commercial viability for having coverage there.
- Perhaps a minimum standard, such as 100% coverage of the interstate, might be a goal.
- Mike returned to the subject of high-risk areas of interest, and indicated that ski areas in Montana might fall in this category.
- Maps for each Tribal Nation also will be generated. A meeting is set for August 21 to discuss their coverage area priorities.

OPEN BOARD DISCUSSON:

Dan said that FN wants five coverage area objectives outlined in a phased approach. State recommendations will become part of the Request for Proposals (RFP) from contractors. Once the state deployment plan is formulated, there will be few changes going forward. It is critical that input be provided now so it could become part of the RFP. Companies responding to the RFP will be asked if they can meet state recommendations; however, there is no guarantee that Montana's coverage priorities will be used.

Determining Montana's five coverage priorities could be based on the following factors:
- Public safety operational areas; what is needed to provide public safety services.
- High/low population density; urban, suburban and rural issues.
- Highways, taking into account visitors to national parks in summer months.
- Population of cities/towns.
- Each of the 56 county seats and 7 tribal governments in Montana. They are vital to how the state and public safety operates.
- Existing 3G sites that could be upgraded to 4G.

Dan requested that the SIGB discuss priorities that can be forwarded to FN. Mike reiterated that he can adjust the relative weight of any of the inputs on the map. Values can be tailored to provide a visual/spatial reflection of SIGB priorities.

Ron suggested using some sort of weighting scale to emphasize those coverage areas that the SIGB wants to prioritize. FN may use Montana's priorities in their contractor selection process.

The highest priority may be remote, rural areas. Here are some highway areas with severe coverage problems in Montana (no voice or data):
- Hwy 83: Seeley-Swan area;

- Hwy 191 going to Big Sky & West Yellowstone;
- Hwy 212 near Lame Deer;
- I-94 from Billings to Glendive;
- Southcentral Montana, where there is no commercial cellular coverage; and
- US 2 from Browning to Idaho border

County seats may be a good starting point, because many of them probably do not have access to 4G LTE coverage. It was suggested that data be gathered on where no voice or data coverage exists in Montana. According to Bonnie, rural carriers would not have a problem sharing the extent of their networks. Coverage data from telecommunications providers could be added as a layer to the mapping project. Dan pointed out that FN prohibited Montana from doing any coverage studies.

Kevin clarified that the purpose of FN is to partition off a piece of existing infrastructure to ensure that communication services can be available for public safety purposes, particularly during emergencies. He indicated that the SIGB needs to make sure that county seats and larger cities from which first responders will be dispatched have the necessary communications to respond appropriately.

Dan reported that FN has 20 GHz of dedicated spectrum, so it will be a stand-alone, 4G LTE system and not part of a commercial system. It will give priority to first responders. Tom Butler pointed out that a private contractor will be awarded the contract, so it will be either Verizon or AT&T in Montana. So, it is likely they will start at existing facilities.

Tom reported that an app was installed on MHP net motion software that is supposed to map the state's Verizon cellular coverage. It has been running for about a year, so MHP should have a very good understanding of where Verizon has coverage and not. He will see if he can provide that information to Dan. However, the data will not necessarily show if the cellular coverage is being transmitted over Verizon's network or a rural provider with which Verizon has entered into roaming agreements. There are some areas in northeast Montana where Verizon and AT&T do not have a presence, but phones will work, because Verizon and AT&T have agreements with rural cellular providers.

Geoff said FN probably expects the SIGB to identify locations such as Billings, Bozeman and places where there are more people, more emergencies and more demand. FN may not be expecting recommendations that are based on the view that those areas are generally okay because they have decent facilities and cellular coverage. He doesn't believe FN is expecting states to identify areas where there is no current coverage as priority areas. The SIGB needs to address the question of what is a higher priority: places where people are or places where coverage isn't.

Tom pointed out that eventually fees will be associated with FN. He said it doesn't make much sense to send a check to FN to have the same coverage that he has today with Verizon. From an MHP perspective, he doesn't need to pay FN and still have the same coverage tomorrow that he has today. That won't benefit MHP. However, he indicated that Kevin made a good point in that county seats are the hub of everything, and there are valid reasons to make sure they can talk to everybody. There are some county seats where you could stand next to the courthouse and have little or non-existent coverage. Tom's vote is to prioritize areas where MHP does not have coverage today.

Quinn explained that when one looks at FN's baseline map and data thresholds, FN is proposing that it will not provide coverage on those roadways that show up as gray (non-terrestrial). Dan clarified that if the SIGB does not provide any recommendations, FN will default to its map. The same is true of population thresholds. When FN looks at a city or county with a 1,000 people, it is below FN's minimum threshold from a national perspective.

It will need to be communicated to them that regardless of traffic level, the SIGB wants coverage on the entire national highway system. Providing coverage along Montana's paved highways could really help improve coverage to Montana's rural areas.

The SIGB may need to communicate to FN that it also wants coverage to all communities in Montana that have a certain minimum number of people. It seems unlikely that FN has any idea of the demographics of Montana, its vast area and coverage needs. Bonnie suggested using the map of Montana that overlays the United States as a useful visual of how Montana's population of about one million people and its geography are different (see example).

Quinn clarified that one objective seems to be to provide coverage to county seats/tribal governments, regardless of population. So, for example, the county seat of Winnett, in Petroleum County, would receive FN coverage regardless of the fact that the entire county has less than one thousand people. There probably are multiple counties similar to this.
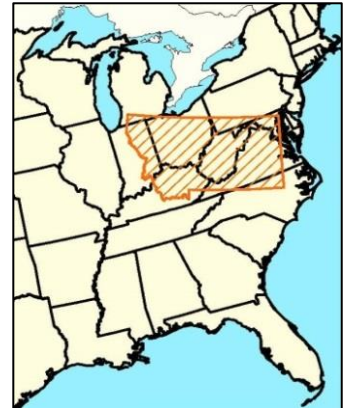
Dan indicated that FN has to survive financially, so FN will want to go where there will be subscribers. If they want MHP to be a subscriber, FN has to offer at least the same or better service than what MHP can currently get. Or, financial incentives will be needed to make migrating to FN appealing. (Geoff pointed out that that the vendor is responsible for making sure that public safety entities migrate to the FN network and that responsibility may be scaring vendors away.) In addition to increasing coverage, FN also will be providing priority usage for public safety providers with a dedicated network. This dedicated spectrum should serve as an incentive.

Ron emphasized the need to provide a narrative about Montana's special rural requirements, perhaps using a matrix of some type. The SIGB has to describe what the state's needs are and how these needs drive its priorities. The SIGB can provide FN what it is asking for—acknowledging coverage needs driven by population centers, national parks, and hospitals—while also emphasizing the need for expanded coverage in areas where coverage does not currently exist. Kevin reiterated the need for Tom Butler's current map of Verizon coverage so it can be incorporated in a layer of Montana's map.

FN has a mandate to cover a certain percentage of "rural" areas; however, it hasn't defined "rural" yet. The SIGB needs to be able to explain the rural nature of Montana and how that makes our state special. Alaska is effective at communicating its unique features. For example, in Montana we only have three towns that have populations over 50,000. We only have four towns with populations between 20,000 and 50,000. Demographically, Montana is not that different from Alaska. However, Montana probably has more small pockets of people than Alaska has, which creates even bigger coverage challenges.

Unserved and under-served areas are a priority for MHP, Tom Butler stated. Ron made an analogy to the Rural Electrification Act, which expanded access to electricity to isolated rural areas of the US. The same philosophy could apply here: to drive coverage in under-served areas.

Funding will be needed to build cell phone towers because in some areas, there is no service to be "partitioned." There is an opportunity to build in rural areas, but FN might not take this recommendation seriously. FN is looking for "reasonable" and feasible solutions. Dan urged the SIGB to focus on its coverage area priorities without regard for whether FN has the funding to meet those priorities.

The SIGB has an opportunity to tell FN where to build public safety communications capabilities where they are most needed.

A reasonable approach might be to place a coverage priority on "county seats/tribal governments," which are vital for public safety and first responder capabilities. Such a coverage priority will automatically include low-population areas. The "county seat/tribal government" coverage priority supports the other priority objective of providing coverage to under-served areas.

September, 30 2015 is the deadline for submitting Montana's coverage area priorities to FN. So, at the next SIGB meeting, the board needs to adopt its five coverage areas priorities. The SIGB needs to tell FN what we, as Montanans, would like to see. Siri asked if this discussion should be continued over e-mail or if a work group should be assigned to work on the recommendations so they can be presented at the next SIGB meeting for the board to vote on.

Here is the timeline:
- September 8th Meeting: Board to adopt coverage area recommendations.
- September 30th: Final report needs to be compiled and submitted to FN.

PUBLIC COMMENT: None.

MEETING SCHEDULE & AGENDA ITEMS: FN coverage area recommendations and new executive order.

ACKNOWLEDGEMENT OF BONNIE LORANG'S SERVICES: MITS is being dissolved by the end of this month. Ron Baldwin acknowledged Bonnie Lorang's service to MITS and rural wireless carriers and thanked her for her service to the SIGB.

NEXT MEETING/ADJOURN: The next meeting is on Sept. 8, 2015 in the DOT Commission Room at 1:30 pm. The meeting adjourned at 3:30.